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EXAMINER

DOUYON, L

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 03/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/254,474

Applicant(s)

LITTA ET AL

Examiner

LORNA M. DOUYON

Group Art Unit

1751

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-10, 13 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10, 13 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Applicant Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☒ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 3 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

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Claim Objections

1. Claims 1-4 are objected to because of the following informalities: The brackets in these amended claims should be deleted because bracketing means deletion of enclosed subject matter in an amended claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Barletta et al. (US Patent No. 4,919,847), hereinafter "Barletta".

Barletta teaches a process for preparing a high bulk density built particulate detergent compositions wherein 23 parts of linear dodecylbenzene sulfonic acid are mixed in "reactor"(51) and sprayed into the absorption zone wherein the acid impinges on swirling sodium carbonate particles, with the proportion of sodium carbonate to sulfonic acid being 77:23, the sulfonic acid (and the accompanying sulfuric acid which is 7%, see Example 1) is neutralized by the sodium carbonate and the effluent from the absorption zone is mixed and agglomerated with bentonite

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(corresponds to free-flowing aid) in a fluidized bed (see Example 3 under col. 9). By computation, the mole ratio of sulfuric acid to sulfonic acid is within the recited range. Barletta also teaches that the product leaving the absorption zone will normally comprise 5 to 40% of the anionic synthetic organic detergent and have a bulk density of at least 0.5 g/cc (see col. 6, lines 19-32; see col. 7, lines 14-20). The molar ratio of inorganic salt to anionic surfactant should inherently be within those recited because of overlapping proportions of the anionic surfactant. Barletta also teaches that the detergent acid to be neutralized may be in the form in which it results from sulf(on)ation of the lipophilic or hydrocarbyl base material, such as alkylbenzene, and normally, as when linear dodecylbenzene sulfonic acid is the detergent acid charged, the concentration of sulf(on)ic acid will be from 80 to 100%, with from 0 to 20% of sulfuric acid, 0 to 3% of free oil (unreacted or byproduct organic material) and 0 to 5% of water (see col. 5, lines 23-31). Barletta also teaches that a typical linear dodecylbenzene sulfonic acid may have from 85 to 95% of sulfonic acid, 5 to 9% of sulfuric acid and 1 to 2% of free oil with any water content thereof being held to no more than 1% (see col. 5, lines 31-35). Barletta also teaches that the agglomerates may be subsequently hardened by binder treatment, using sodium silicate or an organic polymer solution (see col. 6, lines 25-27; 35-37). Barletta teaches each of the limitations of the instant claims. Hence, Barletta anticipates the claims.

4. Claims 2, 4, 5, 8, 9, 10 and 13 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 99/00475, hereinafter "WO '475".

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WO '475 teaches a process for the production of a granular detergent product comprising bringing into contact a liquid binder and a powdered and/or granular solid neutralizing agent, the liquid binder comprising an acid precursor of an anionic surfactant and an inorganic acid, wherein the amount of the inorganic acid is at least 2.5 wt% of the acidic component and the neutralizing agent and the liquid binder are brought into contact and granulated in a low-shear granulator (see claim 1). WO '475 also teaches that the detergent powder has a low bulk density in the range 350 to 650 g/l (see col. 13, lines 31-35). In Example 1, Tests 3-6, WO '475 exemplifies the preparation of granular detergent products having bulk densities in the range from 570-650 g/l, wherein liquid binders comprising linear alkyl benzene sulfonic acid (LAS) and sulphuric acid are neutralized with sodium carbonate, the final composition comprising 15 wt% NaLAS, in situ sodium sulphate of 1.07 to 4.00 wt% and zeolite as flow aid (see page 14, line 16 to page 16 line 15). By computation, the molar ratio of sulphuric acid to LAS, and the molar ratio of in situ sodium sulphate to NaLAS of each of Tests 3-6 are within those recited. WO '475 also teaches that some commercially available acid anionic surfactant precursors contain minor amounts of inorganic acid impurities (see col. 5, lines 2-5). WO '475 teaches each of the limitations of the instant claims. Hence, WO '475 anticipates the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Evaluations of the level of ordinary skill in the art require consideration of such factors as various prior art approaches, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, and failure of others.

The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The evidence of record including the references and/or admissions are considered to reasonably reflect this level of skill.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '475 as applied to the above claims.

WO '475 teaches the features as described above. In addition, WO '475 teaches that the detergent active is present at a level of 5 to 40 wt% (see page 11, lines 20-22). WO '475 also teaches that WO '475. However, fails to disclose an example wherein the anionic surfactant is present in an amount of 28% by weight or more and less than 50% by weight.

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The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see *In re Aller, et al.*, 105 USPQ 233.

8. Applicant cannot rely upon the foreign priority papers to overcome this rejection (i.e., WO '475) because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

9. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references are considered cumulative to or less material than those discussed above.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (703) 305-3773. The examiner can normally be reached on Mondays-Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Technology Center is:

(703) 305-3599 - for Official After Final faxes

(703) 305-7718 - for all other Official faxes.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.

March 23, 2000

Lorna M. Douyon
Lorna M. Douyon
Primary Examiner
Art Unit 1751